

Polyfelt TS Heavy Duty Nonwoven Geotextiles

Properties of Polyfelt TS Heavy Duty Nonwoven Geotextiles

Property	Test Standard	Unit	TS 006	TS 007	TS 008	TS 009
Physical Characteristics	-	-	Continuous filament, nonwoven needle punched			
Polymer	-	-	100% polypropylene, UV stabilized			
UV Resistance						
- Tensile strength retention	ISO 10319	-	> 70% Strength retention after 3 months outdoor weathering			
- Puncture strength retention	ISO 12236	-	> 70% Strength retention after 3 months outdoor weathering			
Chemical Resistance	-	-	No influence at pH range 2 – 13			
Tensile strength (ave)	ISO 10319	kN/m	34	40	42	45
Tensile elongation (MD/CD)	ISO 10319	%	80/50	80/50	80/50	80/50
Performance energy *	Calculated	kN/m	11.00	12.00	13.50	14.50
CBR puncture strength	ISO 12236	N	5400	6200	7200	7800
Dynamic drop cone puncture (diam)	ISO 13433	mm	11	10	9	8
Effective opening size (O ₉₀)	ISO 12956	mm	0.08	0.08	0.07	0.07
Vertical water flow 50mm head	ISO 11058	l/m ² /s	42	36	31	27
Horizontal water flow 20 kPa	ISO 12958	l/m.h	21	24	28	33
in plane 200 kPa	ISO 12958	l/m.h	4.00	5.00	6.00	7.00
Nominal mass	ISO 9864	g/m ²	500	600	700	800
Thickness 2 kPa	ISO 9863	mm	4.00	4.50	5.30	6.00
Grab strength (MD/CD)	ASTM D 4632	N	2350/2150	2900/2900	3300/3100	4000/3700
Grab elongation (MD/CD)	ASTM D 4632	%	80/50	80/50	80/50	80/50
Apparent opening size (O ₉₅)	ASTM D 4751	mm	< 0.075	< 0.075	< 0.075	< 0.075
Permittivity	ASTM D 4491	s ⁻¹	0.95	0.85	0.70	0.60
Form of supply						
Width		m	4	4	4	4
Length		m	75	65	55	45
Area		m ²	300	260	220	180
Weight of roll		kg	160	166	164	154

* Performance energy indicates the ability of the geotextile to absorb construction stress

* Performance energy = ½ (energy MD + energy CD) where

Energy MD = ½ (tensile strength MD x elongation MD)

Energy CD = ½ (tensile strength CD x elongation CD)

Other forms of supply as well as grades, adjusted to the requirements of the project, are available on request.

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The values given are indicative and correspond to average values obtained in accredited testing laboratories and institutes.

Tolerance: Mechanical properties ± 10 %

Hydraulic properties ± 30 %

Further details of this application and products can be obtained by contacting your nearest TenCate Technical Support office.

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